

{rokbox title=|Study area location and hauling stations (white dots) in Spanish Mediterranean waters, western Mediterranean Sea :: Image: Authors|thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-essential-fish-habitats-and-hotspots-nekto-benthic-diversity-density-mediterranean-tugores-et-al-2019-thumb.jpg|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-essential-fish-habitats-and-hotspots-nekto-benthic-diversity-density-mediterranean-tugores-et-al-2019.jpg{/rokbox}

**M. Pilar Tugores, Francesc Ordines, Beatriz Guijarro, Cristina García-Ruíz, Antonio Esteban, Enric Massutí, 2019.**

**[Essential fish habitats and hotspots of nekto-benthic diversity and density in the western Mediterranean.](#)**

Aquatic Conserv: Mar Freshw Ecosyst. 2019; 1–11. <https://doi.org/10.1002/aqc.3031>.

Abstract:

2. Since the 1990s, most currently assessed Mediterranean nekto-benthic stocks have been exploited above maximum sustainable yield and have declined. This study explores the co-occurrence of essential fish habitats for the most important nekto-benthic resources exploited by bottom-trawl fisheries in the western Mediterranean and areas of importance for nekto-benthic communities.

3. Fishery-independent data obtained from Mediterranean scientific bottom-trawl surveys were used to identify persistent hotspots of recruitment for the most important nekto-benthic species around the Iberian Peninsula and the Balearic Islands between 2002 and 2016, as an indicator of their essential fish habitats. Likewise, hotspots of nekto-benthic community diversity and density were also determined, as an estimate of key areas for nekto-benthic communities.

4. Areas of overlap of persistent hotspots of recruitment and of community species richness and density were mainly found on the deep shelf and the upper slope (100–200 m and 200–500 m deep respectively).

5. These overlapping areas could be of particular interest in the development of fishery management plans aiming to implement an ecosystem approach to fisheries. Protection, through temporary or permanent closures, of the overlapping areas identified would contribute to improving both the sustainable exploitation of the main target species of bottom-trawl fisheries and the conservation of nekto-benthic communities.

Keywords: biodiversity, ecosystem approach, fish, habitat mapping, invertebrates, sublittoral